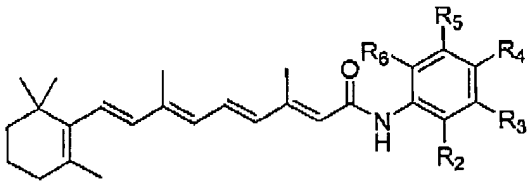
**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 – 4 (canceled)

Claim 5. (currently amended) An arylretinamide for inducing apoptosis in a cancer cell, said arylretinamide having Structure A, B, or C below:




**Structure A**

wherein

$R_2$ is H, OH, $NO_2$, $CH_2$ OH, a halide, or an alkyl comprising 1-4 carbon atoms,

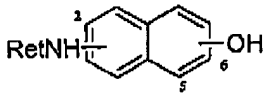
$R_3$ is H, OH, $NO_2$, $CO_2CH_3$, $CO_2CH_2CH_3$, $CO_2(CH_2)_2CH_3$, $CO_2(CH_2)_3CH_3$, $CO_2H$, $CH_2OH$, a halide, or an alkyl comprising 1-4 carbon atoms;

$R_4$ is H, OH, $OCH_3$, $OCH_2CH_3$, $O(CH_2)_2CH_3$, $O(CH_2)_3CH_3$, $SO_2CH_3$, $SO_2CH_2CH_3$, $SO_2(CH_2)_2CH_3$, $SO_2(CH_2)_3CH_3$, $NH_2$, $NHCOCH_3$, $NHCOCH_2CH_3$, $NHCO(CH_2)_2CH_3$, $NHCO(CH_2)_3CH_3$, $NHCOCF_3$, $N_3$, NCS, $NO_2$, a halide, an alkyl comprising 1-4 carbon atoms, or $NHCOCH_2X$, wherein X is a halide;

$R_5$ is H, $NO_2$, $C(CH_3)_3$, $C(CH_2CH_3)_3$, $C((CH_2)_2CH_3)_3$, $C((CH_2)_3CH_3)_3$, $CO_2CH_3$, $CO_2CH_2CH_3$, $CO_2(CH_2)_2CH_3$, $CO_2(CH_2)_3CH_3$, a halide, or an alkyl comprising 1-4 carbon atoms, and

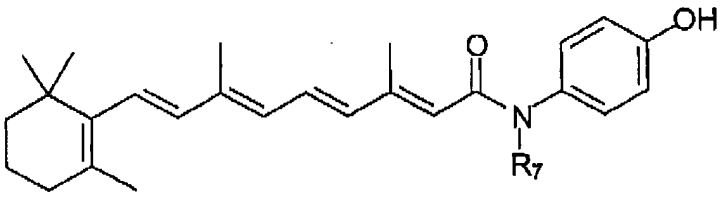
$R_6$ is H, $CO_2H$, $CO_2CH_3$, $CO_2CH_2CH_3$, $CO_2(CH_2)_2CH_3$, $CO_2(CH_2)_3CH_3$, a halide or an alkyl comprising 1-4 carbon atoms;

provided however that when $R_2$, $R_3$, $R_4$, $R_5$, and $R_6$ are all H, $R_4$ is not OH or $OCH_2CH_3$; and also provided that when $R_3$, $R_5$, and $R_6$ are all H, and $R_2$ is OH, $R_4$ is not $CO_2CH_3$.




**Structure B**

wherein the OH group is at position 2,4, or 5 when the retinamido group is at linked to position 1, and the OH group is at position 3 when the rentinamido group is linked to position 2.




**Structure C**

wherein $R_7$ is $C_1$ to $C_4$ alkyl.

Claim 6. (original) The arylretinamide of claim 5 wherein the arylretinamide is a halohydroxyphenyl retinamides which comprises a phenyl moiety that is optionally substituted with an alkyl group .

Claim 7. (original) The arylrentiamide of claim 6 wherein the phenyl moiety is substituted with a methyl group.

Claim 8. (original) The arylreninamide of claim 6 wherein the halo group is an iodo group.

Claim 9. (original) The arylretinamide of claim 5 wherein the arylretinamide is a hydroxy-alkylphenyl retinamides or hydroxy-alkoxyphenyl retinamide, wherein the alkyl groups attached to the phenyl moiety comprise from 1 to 4 carbon atoms.

Claim 10. (original) The arylretinamide of claim 9 wherein the arylretinamide is a hydroxy-methylphenyl or hydroxy-methoxyphenyl retinamide.

Claim 11. (original) The arylretinamide of claim 5 is a hydroxy-nitrophenyl retinamides or alkylsulfonyl-hydroxy retinamides.

Claim 12. (original) The arylretinamide of claim 11 wherein the arylretinamide is an ethylsulfonyl-hydroxy, retinamides.

Claim 13. (original) The arylretinamide of claim 5 wherein the arylretinamide is a hydroxy-napthylphenyl retinamide.

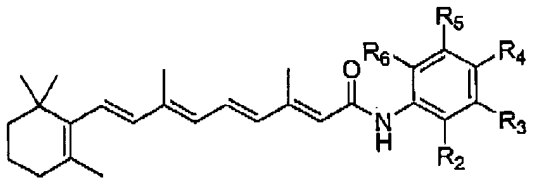
Claim 14. (original) The arylretinamide of claim 5 wherein the arylretinamide is an N-alkyl(hydroxyphenyl) retinamides.

Claim 15. (original) The arylretinamide of claim 5 wherein the arylretinamide is an aminophenyl retinamides.

Claim 16. (original) The arylretinamide of claim 5 wherein the arylretinamdie is an alkylhydroxyphenyl retinamides.

Claim 17. (original) The arylretinamide of claim 5 wherein the arylretinamide is a carboxy-hydroxyphenyl retinamides selected from the group consisting of *N*-(2'-hydroxy-3'-carboxymethylphenyl)retinamide, *N*-(2'-hydroxy-3'-carboxyphenyl)retinamide, *N*-(2'-hydroxy-6'-carboxymethyphenyl)retinamide, *N*-(2'-hydroxy-6'-carboxyphenyl)retinamide, *N*-(3'-hydroxy-4'-carboxymethylphenyl)retinamide, *N*-(3'-hydroxy-4'-carboxyphenyl)retinamide, *N*-(2'-hydroxy-5'-carboxymethylphenyl)retinamide, *N*-(2'-hydroxy-4'-carboxyphenyl)retinamide, *N*-(4'-hydroxy-3'-carboxymethylphenyl)retinamide, and *N*-(4'-hydroxy-3'-carboxyphenyl)retinamide.

Claim 18. (currently amended) An arylretinamide having Structure A below




**Structure A**

wherein

$R_2$ is H, OH, $NO_2$, $CH_2$ OH, a halide, or an alkyl comprising 1-4 carbon atoms,

$R_3$ is H, OH, $NO_2$, $CO_2CH_3$, $CO_2CH_2CH_3$, $CO_2(CH_2)_2CH_3$, $CO_2(CH_2)_3CH_3$, $CO_2H$, $CH_2OH$, a halide, or an alkyl comprising 1-4 carbon atoms;

$R_4$ is H, OH, $OCH_3$, $OCH_2CH_3$, $O(CH_2)_2CH_3$, $O(CH_2)_3CH_3$, $SO_2CH_3$, $SO_2CH_2CH_3$, $SO_2(CH_2)_2CH_3$, $SO_2(CH_2)_3CH_3$, $NH_2$, $NHCOCH_3$, $NHCOCH_2CH_3$, $NHCO(CH_2)_2CH_3$, $NHCO(CH_2)_3CH_3$, $NHCOCF_3$, $N_3$, NCS, $NO_2$, a halide, an alkyl comprising 1-4 carbon atoms, or $NHCOCH_2X$, wherein X is a halide;

$R_5$ is H, $NO_2$, $C(CH_3)_3$, $C(CH_2CH_3)_3$, $C((CH_2)_2CH_3)_3$, $C((CH_2)_3CH_3)_3$, $CO_2CH_3$, $CO_2CH_2CH_3$, $CO_2(CH_2)_2CH_3$, $CO_2(CH_2)_3CH_3$, a halide, or an alkyl comprising 1-4 carbon atoms, and

$R_6$ is H, $CO_2H$, $CO_2CH_3$, $CO_2CH_2CH_3$, $CO_2(CH_2)_2CH_3$, $CO_2(CH_2)_3CH_3$, a halide, or an alkyl comprising 1-4 carbon atoms;

provided that when $R_2$, $R_3$, $R_4$, $R_5$, and $R_6$ are all H, $R_4$ is not OH $OCH_3$, $OCH_2CH_3$, or $O(CH_2)_2CH_3$; and also

provided that when $R_3$, $R_5$, and $R_6$ are all H, and $R_2$ is OH, $R_4$ is not $CO_2CH_3$ or $CO_2CH_2CH_3$.

Claim 19. (original) A method of inducing apoptosis in a cancer cell comprising contacting the cancer cell with an arylretinamide of claim 1.

Claim 20. (original) A method of treating cancer in a subject in need of said treatment, comprising administering one or more arylretinamides of claim 1 to the subject.

Claim 21. (original) The method of claim 20 wherein said method further comprises administering calcium glucarate to the subject.